IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: ISPH-0752

Inventors: Bennett and Freier

Serial No.: Not Yet Assigned

Filing Date: Herewith

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Title: Antisense Modulation of IL-4 Receptor

Associated Kinase-4 Expression

"Express Mail" Label No. EV331020017US Date of Deposit July 30, 2003

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Mail Stop Sequence, P. O. Box 1450, Alexandria, VA 22313-1450.

By <u>Squambludz:</u> Typed Name: Jane Massey Licata, Reg. No. 32,257

Commissioner for Patents Mail Stop Sequence P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §\$1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

- (XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.
- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in \$1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
 - () Certification in Accordance with §1.97(e) is set forth below; or
 - () The fee of \$240.00 as set forth in \$1.17(p) is attached.
- () In accordance with \$1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under \$1.113 or a Notice of Allowance under \$1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with \$1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in \$1.17(I)(1).
- () Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

(XX) In accordance with \$1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/966,451, filed September 28, 2001 for which a claim for priority under 35 U.S.C. \$120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

- () The relevance of the listed references in a foreign language is as stated in the specification at pages 00.
- (XX) All listed references are in the English language.

Respectfully submitted,

Jaunessylveeri

Jane Massey Licata Registration No. 32,257

Date: **July 30, 2003**

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Form PTO-	-1449 Modified	Docket No.	Serial No. not yet assigned					
Cited by	ts and Publications y Application heets if necessary)	Applicant C. Frank Bennett et al.						
, -	of Commerce Patent	Filing Date herewith	Group					
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								
AA	Bacher et al., The Drosophila proteins Pelle and Tube induce JNK/AP-1 activity in mammalian cells, FEBS Lett., 2001, 497:153-158							
AB	Burns et al., Tollip, a new component of the IL-1RI pathway, links IRAK to the IL-1 receptor, Nat. Cell Biol., 2000, 2:346-351							
AC	Burns et al., MyD88, an adapter protein involved in interleukin-1 signaling, J. Biol. Chem., 1998, 273:12203-12209							
AD	Cao et al., IRAK: a kinase associated with the interleukin-1 receptor, Science, 1996, 271:1128-1131							
AE	Huang et al., Recruitment of IRAK to the interleukin 1 receptor complex requires interleukin 1 receptor accessory protein, Proc. Natl. Acad. Sci. U. S. A., 1997, 94:12829-12832							
AF	Jefferies et al., Transactivation by the p65 Subunit of NF-kappaB in Response to Interleukin-1 (IL-1) Involves MyD88, IL-1 Receptor-Associated Kinase 1, TRAF-6, and Rac1, Mol. Cell. Biol., 2001, 21:4544-4552							
AG	O'Neill et al., Signal transduction pathways activated by the IL-1 receptor family: ancient signaling machinery in mammals, insects, and plants, J. Leukoc. Biol., 1998, 63:650-657							
АН	Scanlan et al., Antigens recognized by autologous antibody in patients with renal-cell carcinoma, Int. J. Cancer. 1999, 83:456-464							
AI	Vig et al., Modulation of tumor necrosis factor and interleukin-1-dependent NF-kappaB activity by mPLK/IRAK, J. Biol. Chem., 1999, 274:13077-13084							
AJ	Vig et al., SIMPL is a tumor necrosis factor-specific regulator of nuclear factor-kappaB activity, J. Biol. Chem., 2001, 276:7859-7866							
EXAMINER DATE CONSIDERED								

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Form PTO-1449 Modified	Docket No. IS MI -0752	Serial No. not yet assigned							
List of Patents and Publication Cited by Application (Use several sheets if necessar	C. Frank Benne	Applicant C. Frank Bennett <i>et al</i> .							
U.S. Department of Commerce Pate and Trademark Office	Filing Date	Group							
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
Pelle/interleu	et al., IRAK-M is a novel member of the interleukin-1 receptor-associated kinase (IRAK), J. Biol. Chem., 1999 , 274:19403-19410								
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